



TOWN OF ARLINGTON
REDEVELOPMENT BOARD

Application for Special Permit In Accordance with Environmental Design
Review Procedures (Section 11.06 of the Zoning Bylaw)

1. Property Address 483 SUMMER ST. ARLINGTON, MA 02474 Docket No. _____
Name of Record Owner(s) CAMPOBASSO PROPERTIES LLC Phone 781-646-5569
Address of Owner 290 MASS. AVE, ARLINGTON, MA 02474
Street City, State, Zip
2. Name of Applicant(s) (if different than above) SAME AS ABOVE
Address _____ Phone _____
Status Relative to Property (occupant, purchaser, etc.) OWNER
3. Location of Property MAP 082.0, BLOCK 0003, LOT 0003.0
Assessor's Block Plan, Block, Lot No.
4. Deed recorded in the Registry of deeds, Book 13819, Page 139;
-or- registered in Land Registration Office, Cert. No. _____, in Book _____, Page _____.
5. Present Use of Property (include # of dwelling units, if any) REPAIR SHOP
(VACANT)
6. Proposed Use of Property (include # of dwelling units, if any) MIXED USE
RESIDENTIAL + COMMERCIAL FOUR STORES, 1 OFFICE, 7 RESIDENCES
7. Permit applied for in accordance with the following Zoning Bylaw section(s) 5.04/s. 7/13 Mixed use development -residential/commercial
Article 11 s. 11.06 Special Regulations
8.01A Parking for residential/commercial mixed use
8.12 Reduction for parking requirement for mixed development
section(s) title(s)
8. Please attach a statement that describes your project and provide any additional information that may aid the ARB in understanding the permits you request. Include any reasons that you feel you should be granted the requested permission.

(In the statement below, strike out the words that do not apply)

The applicant states that CAMPOBASSO PROPERTIES LLC is the owner -or- occupant -or- purchaser under agreement of the property in Arlington located at 483 SUMMER ST. ARLINGTON, MA 02474 which is the subject of this application; and that unfavorable action -or- no unfavorable action has been taken by the Zoning Board of Appeals on a similar application regarding this property within the last two years. The applicant expressly agrees to comply with any and all conditions and qualifications imposed upon this permission, either by the Zoning Bylaw or by the Redevelopment Board, should the permit be granted.

Signature of Applicant(s) Campobasso Properties, LLC, by its attorney, Robert J. Annese

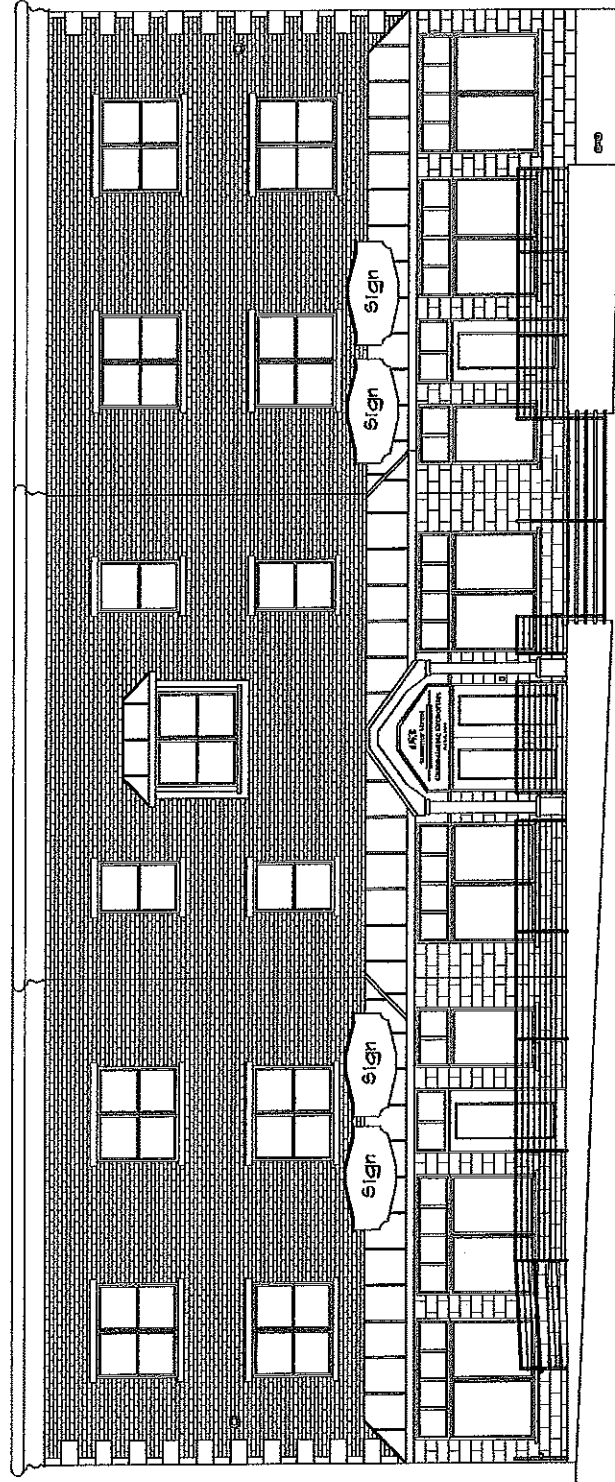
290 MASS. AVE ARLINGTON, MA 02474

Address

781-646-5569

Phone

7/08



Lot Size: 10,000 sf
 Zoning District: B2
 Proposed Use: Mixed Use, 4 Stores, 1 Office
 and 1 Residence
 Building: 3 story with Cellar
 Wood Frame with Fire Protection
 Foot Print: 3,892 sf
 Gross Residential Floor Area: 7,100 sf
 Total Gross Floor Area: 11,946 sf
 Open Area Landscaped 969 sf
 Open Area Usable 1,420 sf

Proposed 483 Summer Street

Site Plan of Lot of 483 & 489 Summer Street
 Proposed Site Plan of 483 & 489 Summer Street
 Landscaping Detail Street of 483 & 489 Summer Street
 Landscaping Plan of 483 & 489 Summer Street
 A-1 Ground Level
 A-2 Second Level
 A-3 Third Floor
 A-4 Roof Top
 A-5 Residence Building
 A-6 North Elevation
 A-7 South Elevation
 A-8 East Elevation
 A-9 West Elevation

Prepared For: Campobasso Properties LLC
 230 Mass. Ave.
 Arlington, MA 02474

Prepared By: A. R. Roneyne & Sons LLC
 28 Grove Street Place
 Arlington, MA 02474

Date: 9/7/16
 Scale: 1/4" = 1'-0"



Town of Arlington Redevelopment Board
Application for Special Permit in accordance with
Environmental Design Review (Section 11.06)

Required Submittals Checklist

File each in triplicate except for model
References are to Arlington Zoning Bylaw

- ① _____ Dimensional and Parking Information Form
- ② _____ Site plan of proposal (Section 10.11(c))
- ③ _____ Model, if required (Section 11.06(d)(1))
- ④ _____ Drawing of existing conditions (Section 11.06(d)(3))
- ⑤ _____ Drawing of proposed structure (Section (d)(3))
- ⑥ _____ Proposed landscaping. May be incorporated into site plan (Section 11.06(d)(3))
- ⑦ _____ Photographs (Section 11.06(d)(4))
- ⑧ _____ Impact statement (Section 11.06(d)(6))
- ⑨ _____ Application and plans for sign permits (Section 11.06(d)(6))

FOR OFFICE USE ONLY

_____ Special Permit Granted	Date: _____
_____ Received evidence of filing with Registry of Deeds	Date: _____
_____ Notified Building Inspector of Special Permit filing	Date: _____

TOWN OF ARLINGTON

Dimensional and Parking Information
for Application to
The Arlington Redevelopment Board

Docket No. _____

Property Location 483 SUMMER ST. ARLINGTON, MA.

Zoning District B 2

Owner: CAMPOBASSO PROPERTIES LLC

Address: 290 MASS AVE ARLINGTON, MA 02474

Present Use/Occupancy: No. of Dwelling Units:
VACANT

Uses and their gross square feet:
AUTO REPAIR 1,148^{sq}

Proposed Use/Occupancy: No. of Dwelling Units:
MIX USE 4 STORES-10 OFFICE 7 RESIDENCE

Uses and their gross square feet:
STORES 3,524 OFFICE 782 RESIDENCES 7,100^{sq}

	Present Conditions	Proposed Conditions	Min. or Max. Required by Zoning for Proposed Use
Lot Size	10,000 ^{sq}	10,000 ^{sq}	min. MIN.
Frontage	100 L.F.	100 L.F.	min. 50 L.F.
Floor Area Ratio	.11	1.36	max. 1.5
Lot Coverage (%) (where applicable)	NA	NA	max. NA
Lot Area per Dwelling Unit (square feet)	NA	1,429 ^{sq}	min. 1,450 ^{sq}
Front Yard Depth (Ft.)	—	—	min. —
Side Yard Width (Ft.) right side	—	—	min. —
left side	—	—	min. —
Rear Yard Depth (Ft.)	NA	41'	min. 18.4'
Height	—	—	min. —
Stories	1	3	stories 3
Feet	20'	38'	feet 40
Open Space (% of G.F.A.) RESIDENTIAL	—	—	min. —
Landscaped (s.f.)	NA	969 ^{sq}	(s.f.) 710 ^{sq}
Usable (s.f.)	—	1420 ^{sq}	(s.f.) 1,420 ^{sq}
Parking Spaces (No.)	NA	9	min. 19
Parking Area Setbacks (Ft.) (where applicable)	NA	5'	min. 5'
Loading Spaces (No.)	NA	SHARED	min. 1
Type of Construction	FIRE PROTECTED WOOD FRAME		
Distance to Nearest Building	—	22' +	min. —

A.R. Ronayne & Sons LLC



*28 Grove Street Place
Arlington, MA 02474
(781) 648-0627*

Site Plan

Please see:

Proposed Site Plan
Of
483 & 489 Summer Street
In
Arlington, MA

Prepared By: Paul J. Finocchio P.L.S. No.36115
P.J.F. and Associates
4 Highland Avenue
Wakefield, MA 01880
(781)246-5426

Plan Includes:

Dimensions of Lot
Proposed Building and Set Backs
Proposed Drainage
Dumpster Location
Landscape Layout

A. R. Ronayne & Sons LLC



*28 Grove Street Place
Arlington, MA 02474
(781) 648-0627*

Proposed Structure

Please see:

Proposed 483 Summer Street
 Arlington, MA

Prepared By: A. R. Ronayne & Sons LLC
 28 Grove Street Place
 Arlington, MA 02474

Plan Includes:

- Floor Plans for cellar, first, second and third floors
- Elevations of all sides of the building

Sullivan Engineering Group, LLC
Civil Engineers & Land Development Consultants

November 21, 2016

Town of Arlington Engineering Department

**Re: 483-489 Summer Street, Arlington
Site Redevelopment**

To Whom It May Concern:

The owner of #483-#489 Summer Street is seeking to redevelop a portion of the property, specifically #483 Summer Street. In order to mitigate increases in pavement, walkways, and building areas the applicant is proposing to install porous pavement with a constructed stone subbase to provide storage and infiltration of stormwater runoff. Soil testing was conducted on the property on 8/25/16 by Jack Sullivan, PE, CSE. The site was predominately fill in the front of the site and a Loamy Sand was identified to the rear of the site. There was no indication of a seasonal high groundwater table to a depth of 84". The NRCS soil maps show this area as "urban soils" and as such the site was modeled for "B" type soils. The Site Plans for this project prepared by PJF Associates provide a construction detail showing the porous pavement specifications including the subbase preparation. Additionally, an Operation and Maintenance plan for short term & long term maintenance is shown on this detail sheet and the O&M plan should be part of the Conditions of Approval. As a conservative approach, the porous pavement was modeled with an exfiltration rate of 60 MPI which is equivalent to a Sandy Loam - Class B soil under the Rawl's method.

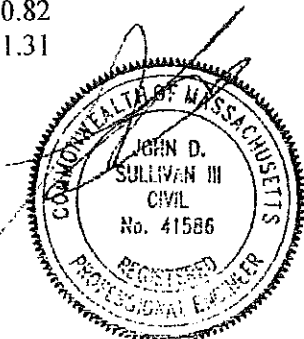
All existing pavement areas onsite (@ #483 Summer Street) will be removed and replaced with porous pavement and the required subbase to provide consistency in maintenance for the site in the post development scenario. The roofed area of the proposed building will be conveyed via 4" HDPE solid pipe into the subbase material and then the roof drain shall change to 4" HDPE perforated pipe. A minimum of two feet of cover should be provided over the roof drain within the travel way.

The HydroCAD report models the Predevelopment Condition vs. Postdevelopment Condition for the entire site area. The stormwater design reduces the peak rate of runoff and volume for the 2, 10, and 100 year storm event. The following is summary of the peak rate of runoff for various storm events:

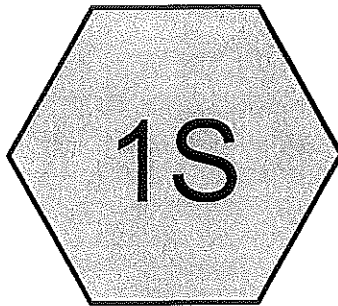
<u>Storm Event</u>	Predevelopment (cfs)	Postdevelopment (cfs)
2 Year	0.52	0.06
10 Year	0.82	0.12
100 Year	1.31	0.22

Very Truly Yours,

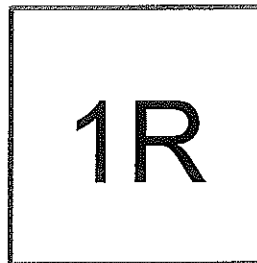
John (Jack) D. Sullivan III, PE



11-21-16



Total Site Area



Total Offsite



Link

Predevelopment_11212016

Type III 24-hr 2 Year Storm Rainfall=3.00"

Prepared by {enter your company name here}

Page 2

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11/21/2016

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Total Site Area

Runoff Area=10,000 sf Runoff Depth=1.86"
Tc=6.0 min CN=90 Runoff=0.52 cfs 0.036 af

Reach 1R: Total Offsite

Inflow=0.52 cfs 0.036 af
Outflow=0.52 cfs 0.036 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.036 af Average Runoff Depth = 1.86"

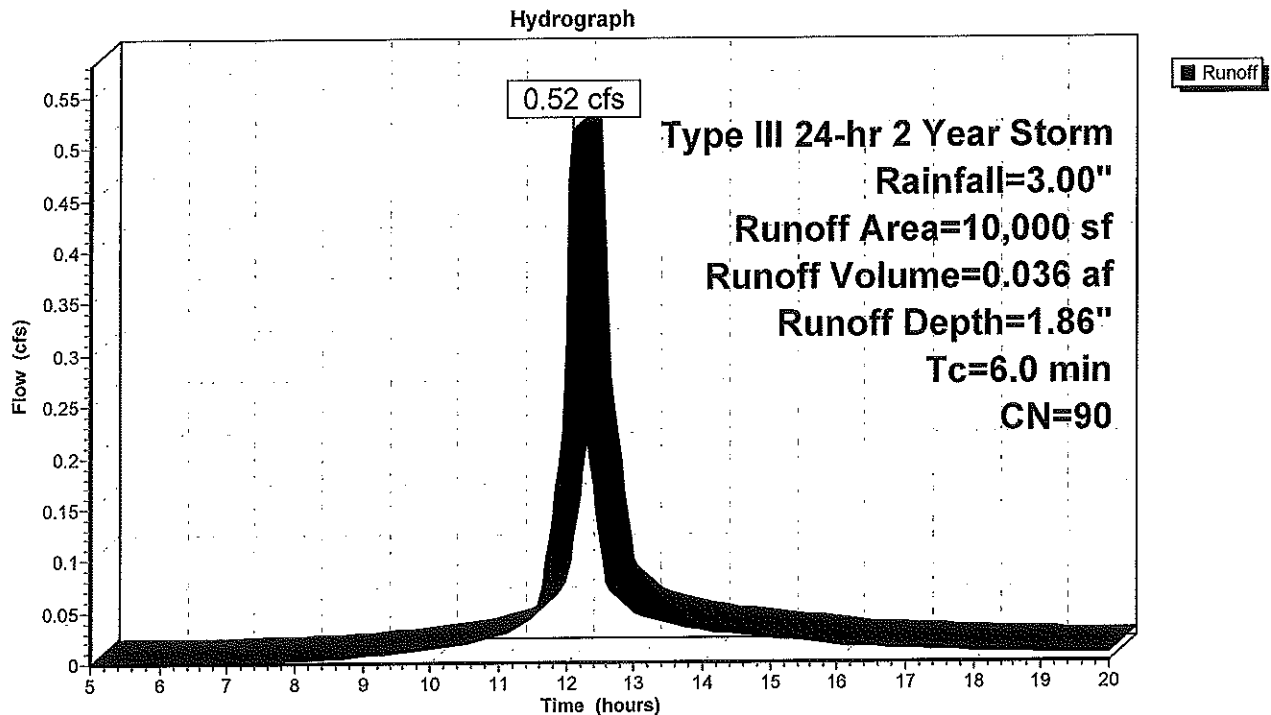
Subcatchment 1S: Total Site Area

Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af, Depth= 1.86"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Storm Rainfall=3.00"

Area (sf)	CN	Description
1,165	98	Ex. Building Roof
5,972	98	Pavement/Conc Areas
2,863	69	50-75% Grass cover, Fair, HSG B
10,000	90	Weighted Average

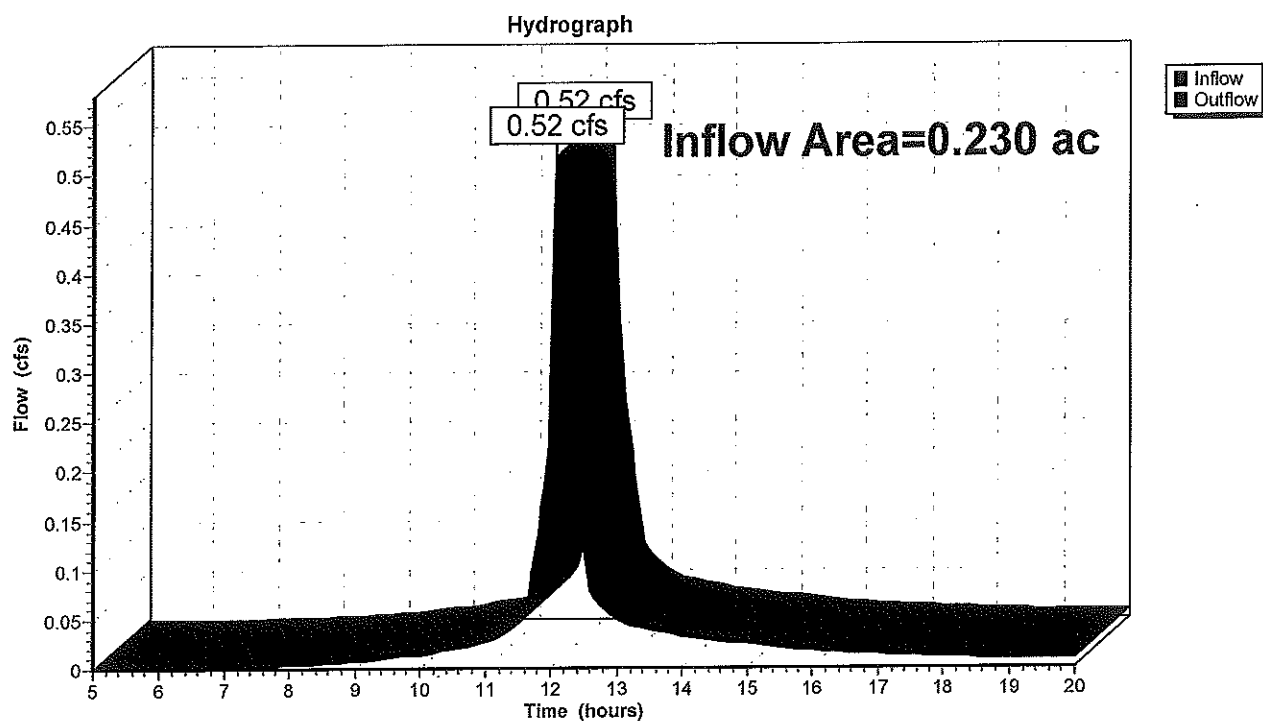
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1S: Total Site Area

Reach 1R: Total Offsite

Inflow Area = 0.230 ac, Inflow Depth = 1.86" for 2 Year Storm event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite

Predevelopment_11212016

Type III 24-hr 10 Year Storm Rainfall=4.30"

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11/21/2016

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Total Site Area

Runoff Area=10,000 sf Runoff Depth=3.02"
Tc=6.0 min CN=90 Runoff=0.82 cfs 0.058 af

Reach 1R: Total Offsite

Inflow=0.82 cfs 0.058 af
Outflow=0.82 cfs 0.058 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.058 af Average Runoff Depth = 3.02"

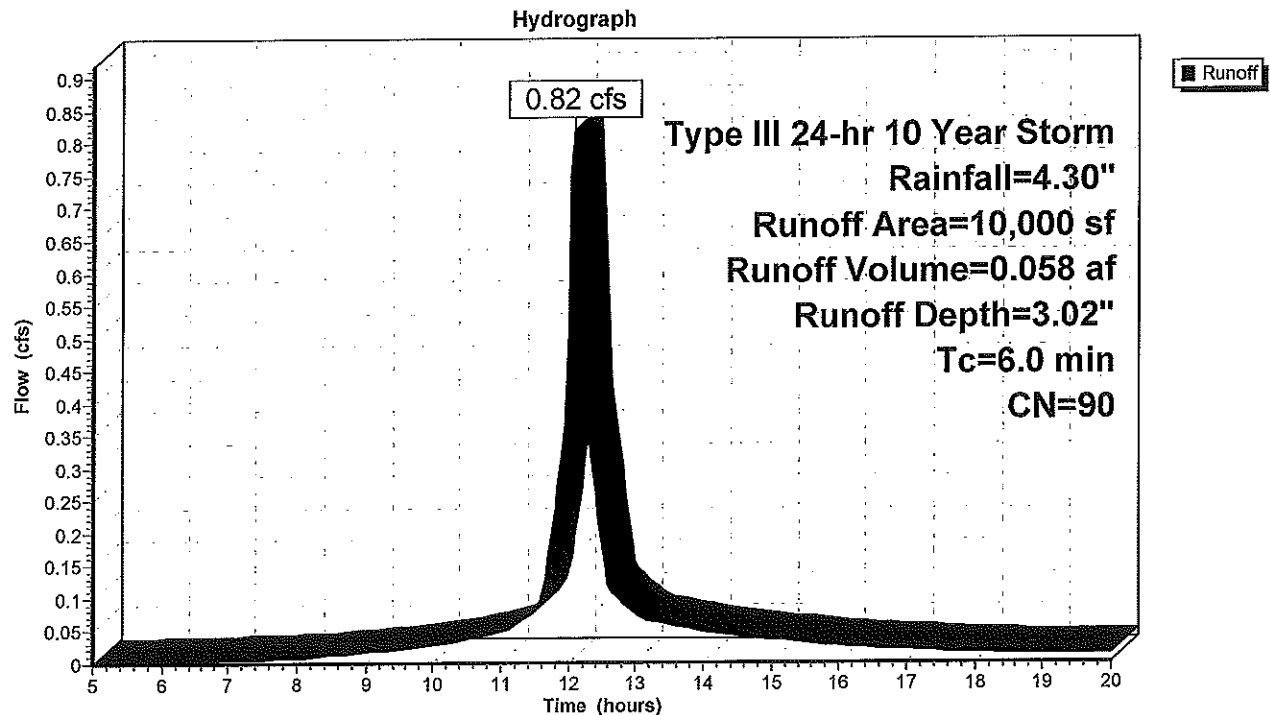
Subcatchment 1S: Total Site Area

Runoff = 0.82 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 3.02"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Storm Rainfall=4.30"

Area (sf)	CN	Description
1,165	98	Ex. Building Roof
5,972	98	Pavement/Conc Areas
2,863	69	50-75% Grass cover, Fair, HSG B
10,000	90	Weighted Average

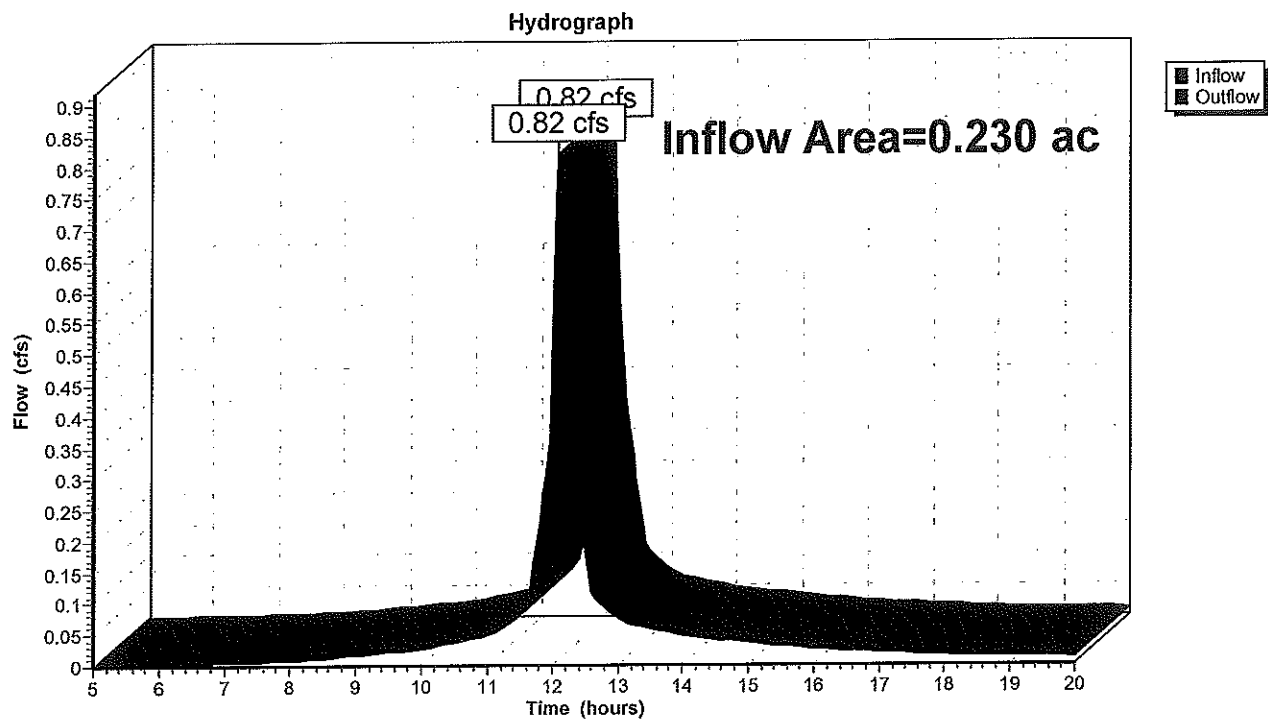
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1S: Total Site Area

Reach 1R: Total Offsite

Inflow Area = 0.230 ac, Inflow Depth = 3.02" for 10 Year Storm event
Inflow = 0.82 cfs @ 12.09 hrs, Volume= 0.058 af
Outflow = 0.82 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite

Predevelopment_11212016*Type III 24-hr 100 Year Storm Rainfall=6.40"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Total Site AreaRunoff Area=10,000 sf Runoff Depth=4.95"
Tc=6.0 min CN=90 Runoff=1.31 cfs 0.095 af**Reach 1R: Total Offsite**Inflow=1.31 cfs 0.095 af
Outflow=1.31 cfs 0.095 af**Total Runoff Area = 0.230 ac Runoff Volume = 0.095 af Average Runoff Depth = 4.95"**

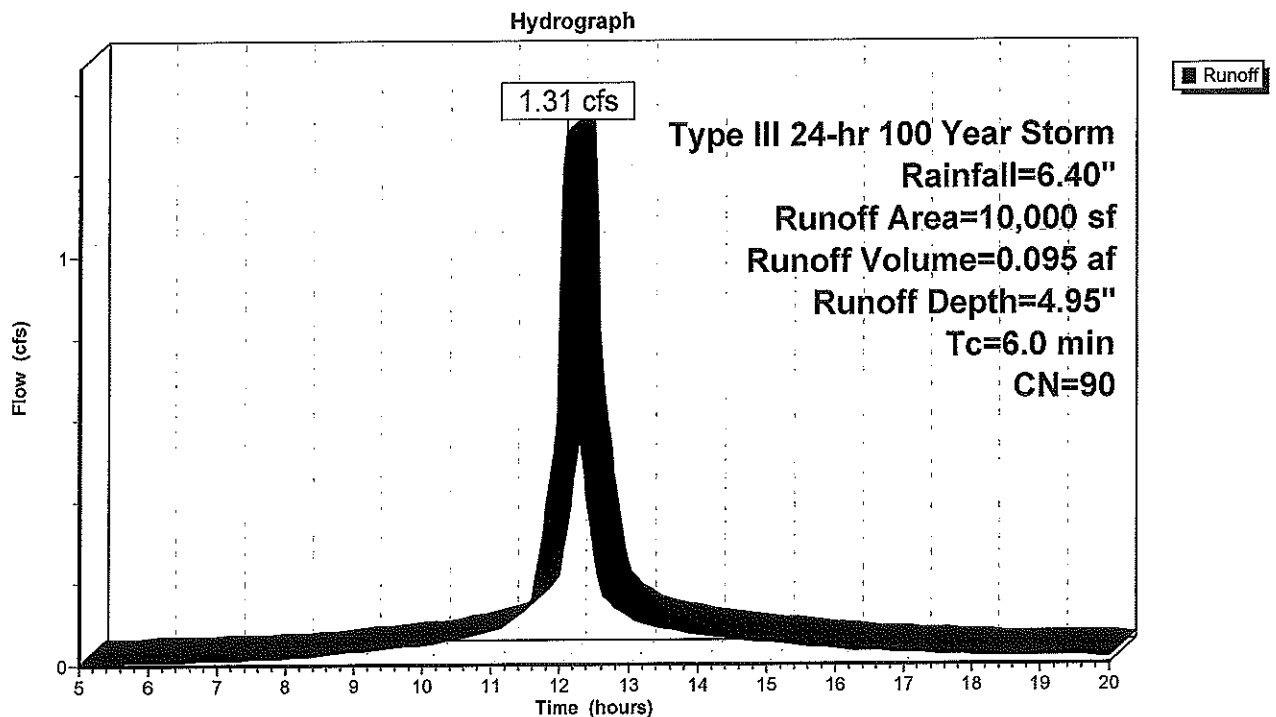
Subcatchment 1S: Total Site Area

Runoff = 1.31 cfs @ 12.09 hrs, Volume= 0.095 af, Depth= 4.95"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Storm Rainfall=6.40"

Area (sf)	CN	Description
1,165	98	Ex. Building Roof
5,972	98	Pavement/Conc Areas
2,863	69	50-75% Grass cover, Fair, HSG B
10,000	90	Weighted Average

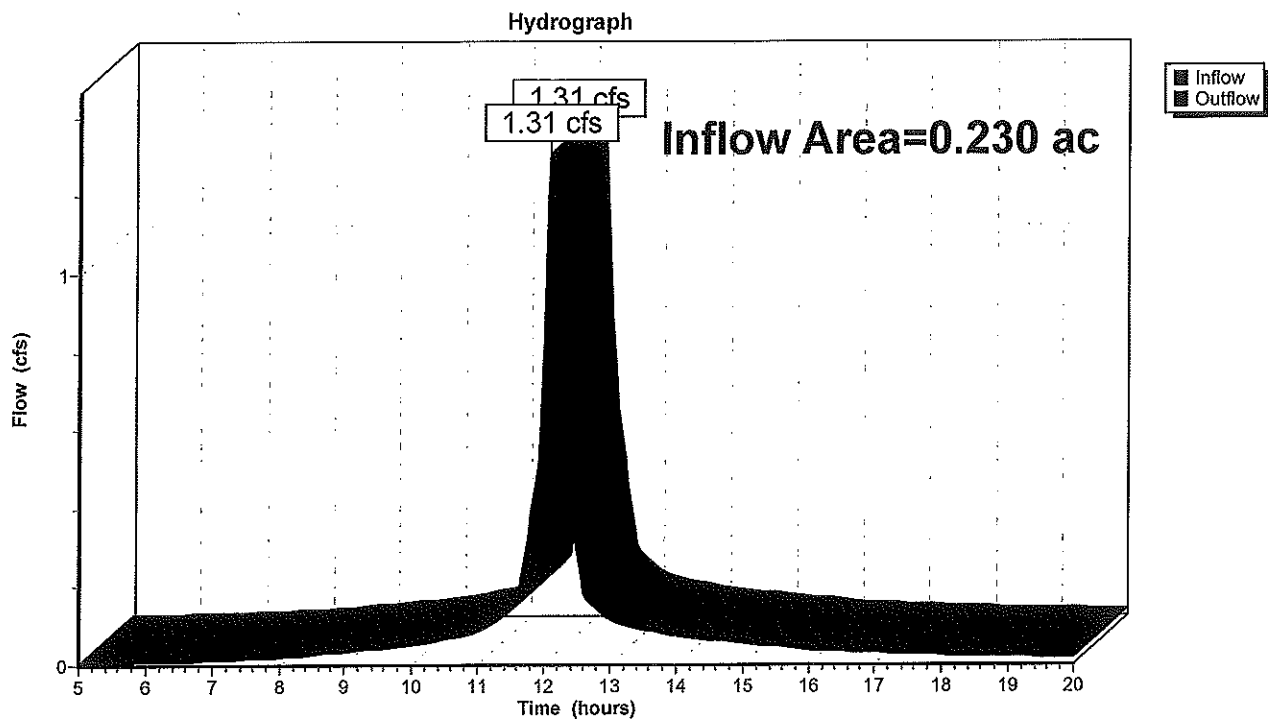
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

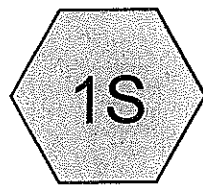
Subcatchment 1S: Total Site Area

Reach 1R: Total Offsite

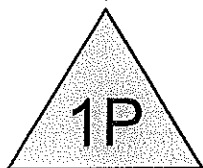
Inflow Area = 0.230 ac, Inflow Depth = 4.95" for 100 Year Storm event
Inflow = 1.31 cfs @ 12.09 hrs, Volume= 0.095 af
Outflow = 1.31 cfs @ 12.09 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

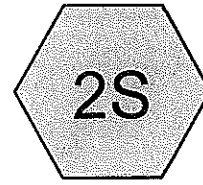
Reach 1R: Total Offsite



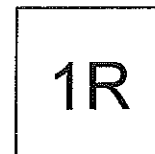
Flow to Porous Pvmt



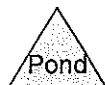
Porous pvmt Base



Remaining Areas



Total Offsite



Link

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Flow to Porous Pvmt

Runoff Area=7,914 sf Runoff Depth=1.67"

Tc=462.0 min CN=98 Runoff=0.05 cfs 0.025 af

Subcatchment 2S: Remaining Areas

Runoff Area=2,086 sf Runoff Depth=1.09"

Tc=6.0 min CN=79 Runoff=0.06 cfs 0.004 af

Reach 1R: Total Offsite

Inflow=0.06 cfs 0.004 af

Outflow=0.06 cfs 0.004 af

Pond 1P: Porous pvmt Base

Peak Elev=97.01' Storage=18 cf Inflow=0.05 cfs 0.025 af

Outflow=0.05 cfs 0.025 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.030 af Average Runoff Depth = 1.55"

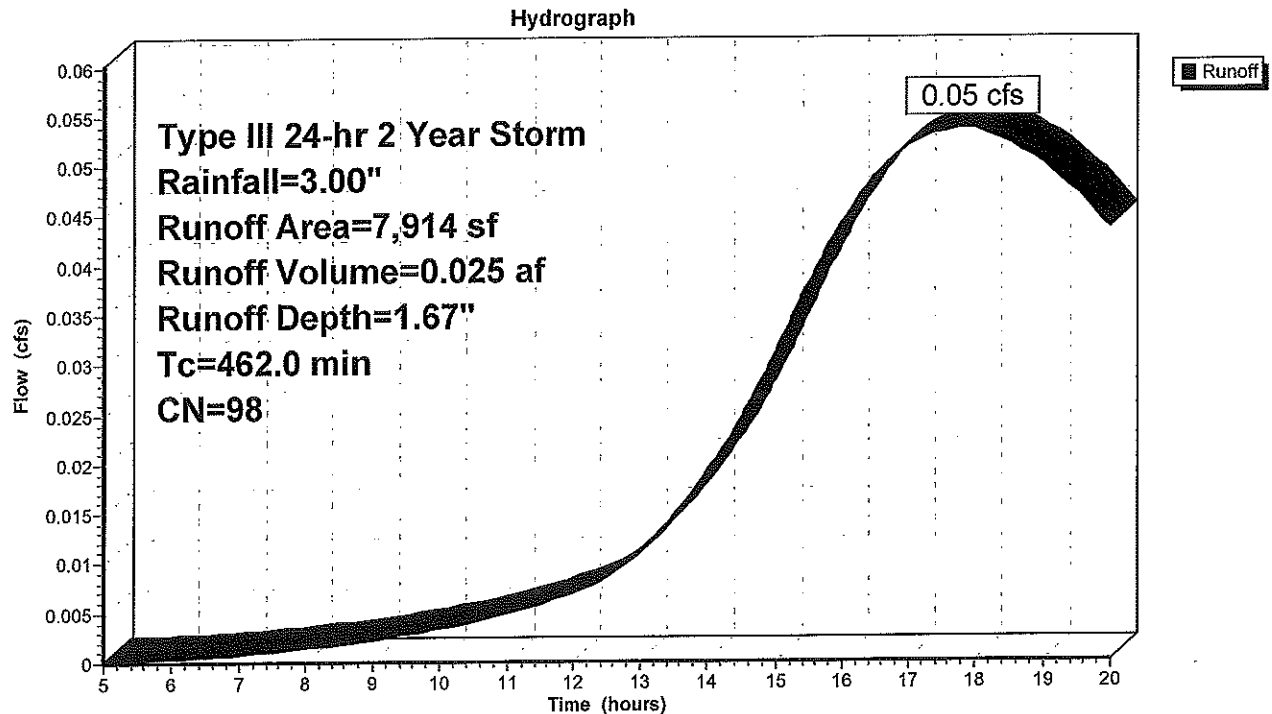
Subcatchment 1S: Flow to Porous Pvmt

Runoff = 0.05 cfs @ 17.94 hrs, Volume= 0.025 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Storm Rainfall=3.00"

Area (sf)	CN	Description
3,860	98	Porous Pvmt
3,892	98	Portion of Roofed Area
162	98	dumpster pad area
7,914	98	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
462.0					Direct Entry,

Subcatchment 1S: Flow to Porous Pvmt

Subcatchment 2S: Remaining Areas

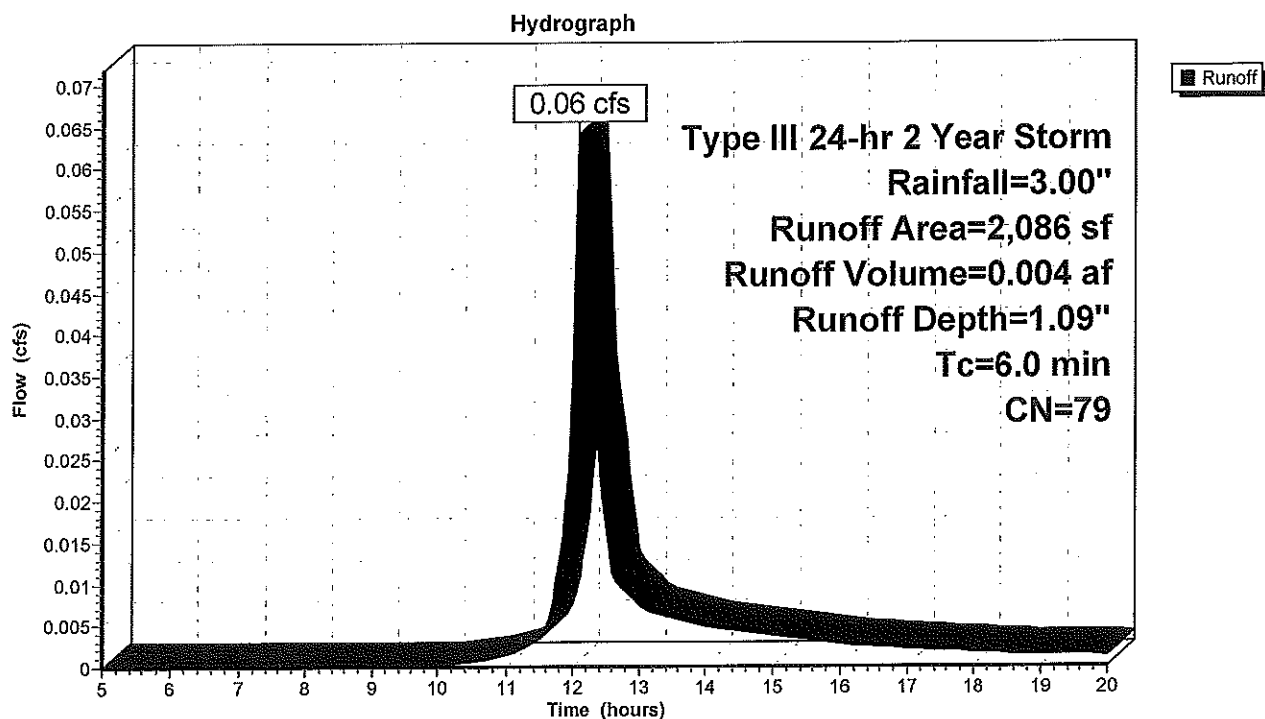
Runoff = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af, Depth= 1.09"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Storm Rainfall=3.00"

Area (sf)	CN	Description
426	98	Walkway
307	98	Apshalt Berm
1,353	69	50-75% Grass cover, Fair, HSG B
2,086	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

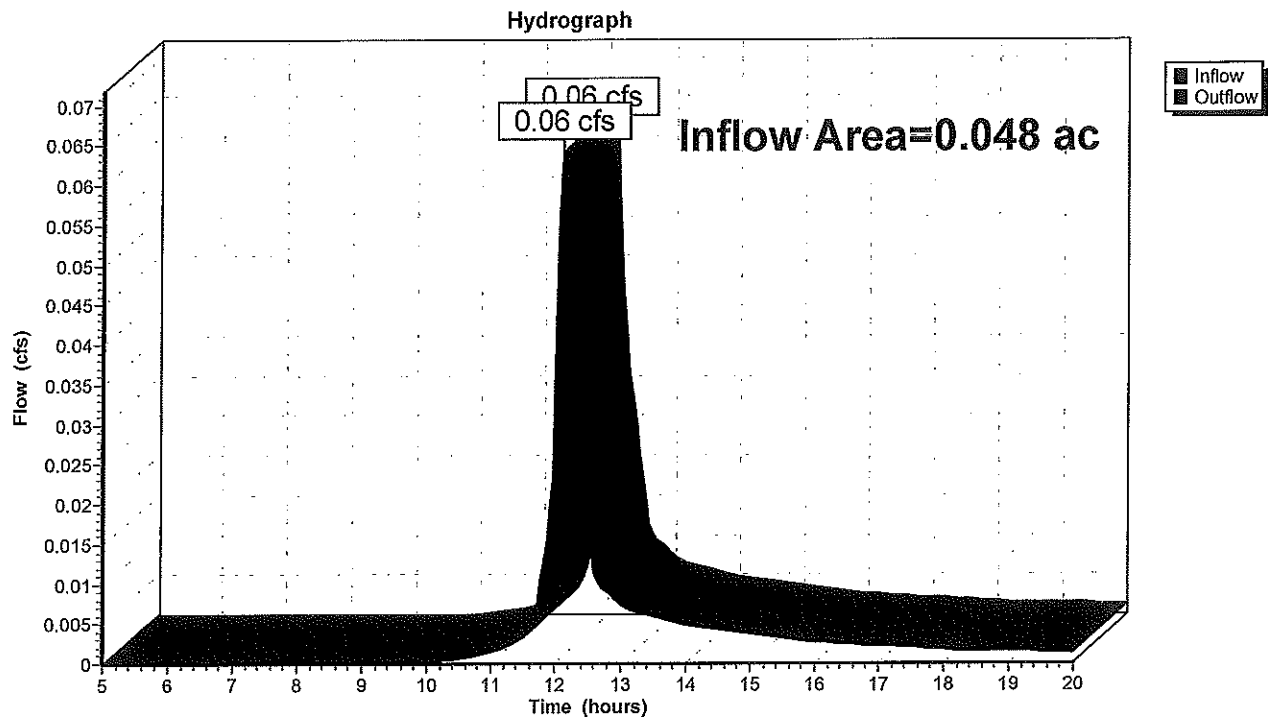
Subcatchment 2S: Remaining Areas



Reach 1R: Total Offsite

Inflow Area = 0.048 ac, Inflow Depth = 1.09" for 2 Year Storm event
Inflow = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af
Outflow = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite

Pond 1P: Porous pvmt Base

Design Perc rate of soils = 60 MPI

Inflow Area = 0.182 ac, Inflow Depth = 1.67" for 2 Year Storm event
 Inflow = 0.05 cfs @ 17.94 hrs, Volume= 0.025 af
 Outflow = 0.05 cfs @ 17.99 hrs, Volume= 0.025 af, Atten= 0%, Lag= 3.0 min
 Discarded = 0.05 cfs @ 17.99 hrs, Volume= 0.025 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 97.01' @ 17.99 hrs Surf.Area= 3,860 sf Storage= 18 cf
 Plug-Flow detention time= 5.7 min calculated for 0.025 af (99% of inflow)
 Center-of-Mass det. time= 2.8 min (999.4 - 996.5)

#	Invert	Avail.Storage	Storage Description
1	97.00'	3,088 cf	38.60'W x 100.00'L x 2.00'H Prismatoid 7,720 cf Overall x 40.0% Voids

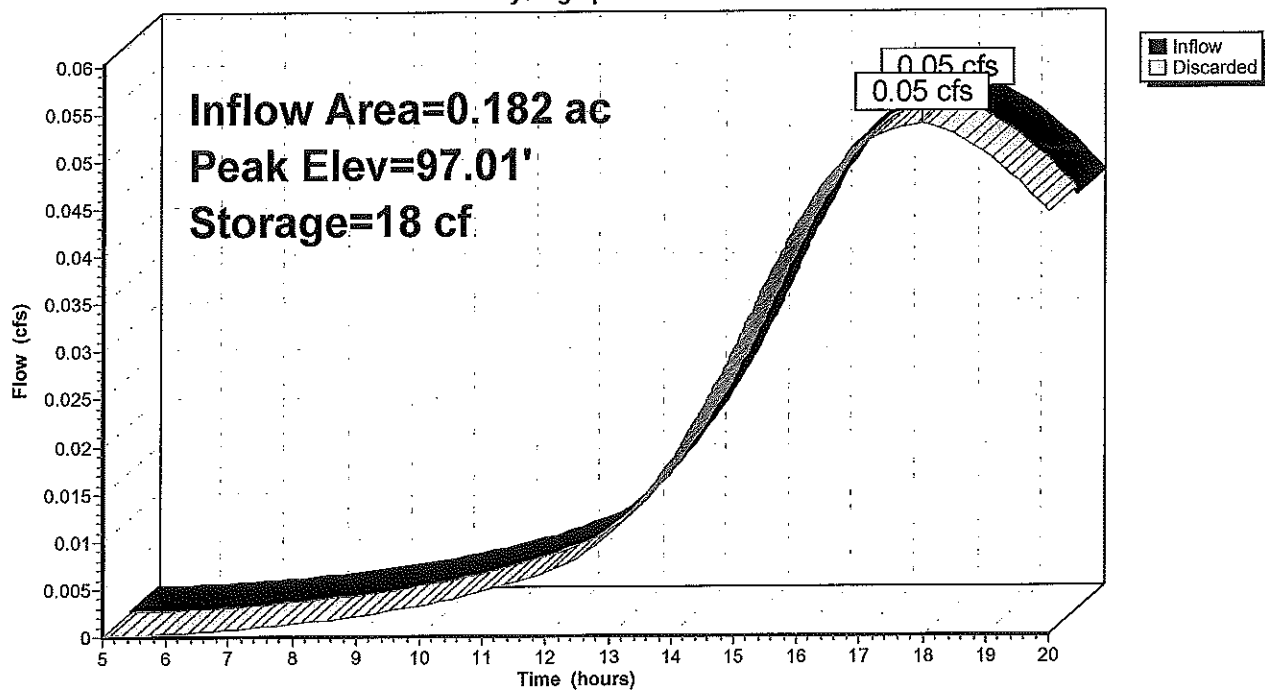
#	Routing	Invert	Outlet Devices
1	Discarded	0.00'	0.001400 fpm Exfiltration over entire Surface area

Discarded OutFlow Max=0.09 cfs @ 17.99 hrs HW=97.01' (Free Discharge)

1=Exfiltration (Exfiltration Controls 0.09 cfs)

Pond 1P: Porous pvmt Base

Hydrograph



Postdevelopment_11212016*Type III 24-hr 10 Year Storm Rainfall=4.30"*

Prepared by {enter your company name here}

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11/21/2016

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Flow to Porous Pvmt

Runoff Area=7,914 sf Runoff Depth=2.47"
Tc=462.0 min CN=98 Runoff=0.08 cfs 0.037 af

Subcatchment 2S: Remaining Areas

Runoff Area=2,086 sf Runoff Depth=2.05"
Tc=6.0 min CN=79 Runoff=0.12 cfs 0.008 af

Reach 1R: Total Offsite

Inflow=0.12 cfs 0.008 af
Outflow=0.12 cfs 0.008 af

Pond 1P: Porous pvmt Base

Peak Elev=97.02' Storage=27 cf Inflow=0.08 cfs 0.037 af
Outflow=0.08 cfs 0.037 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.046 af Average Runoff Depth = 2.38"

Subcatchment 1S: Flow to Porous Pvmnt

Runoff = 0.08 cfs @ 17.94 hrs, Volume= 0.037 af, Depth= 2.47"

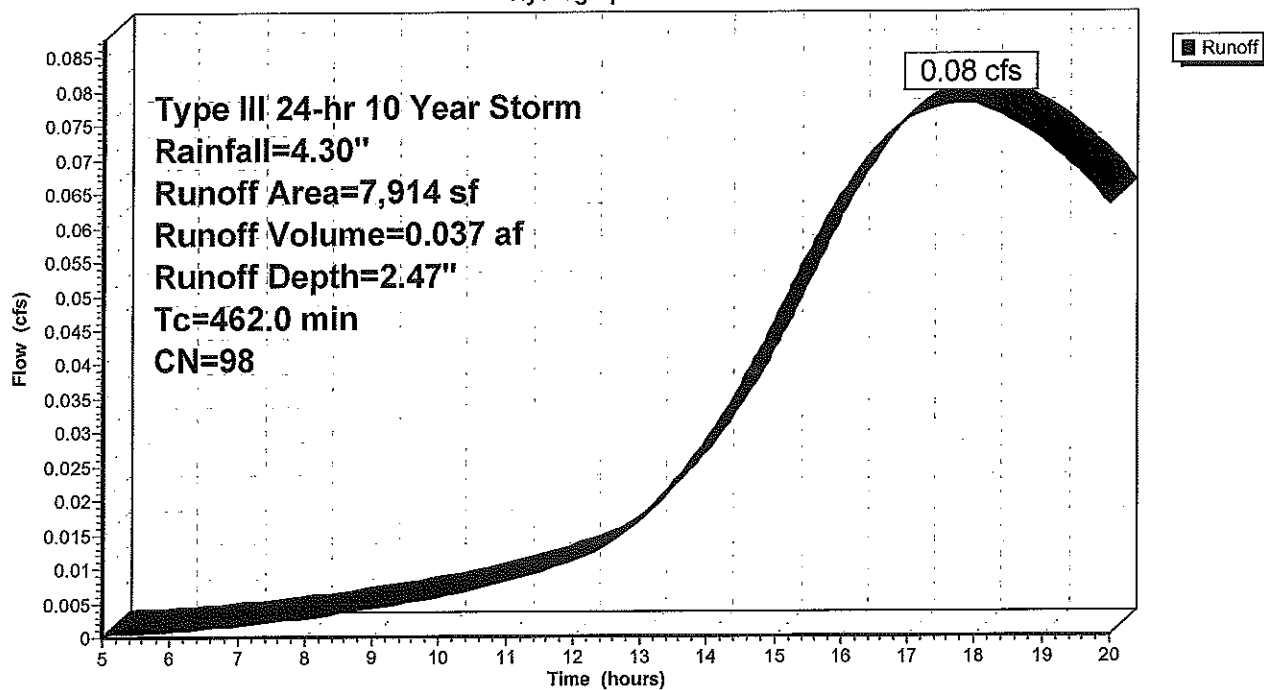
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Storm Rainfall=4.30"

Area (sf)	CN	Description
3,860	98	Porous Pvmnt
3,892	98	Portion of Roofed Area
162	98	dumpster pad area
7,914	98	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
462.0					Direct Entry,

Subcatchment 1S: Flow to Porous Pvmnt

Hydrograph



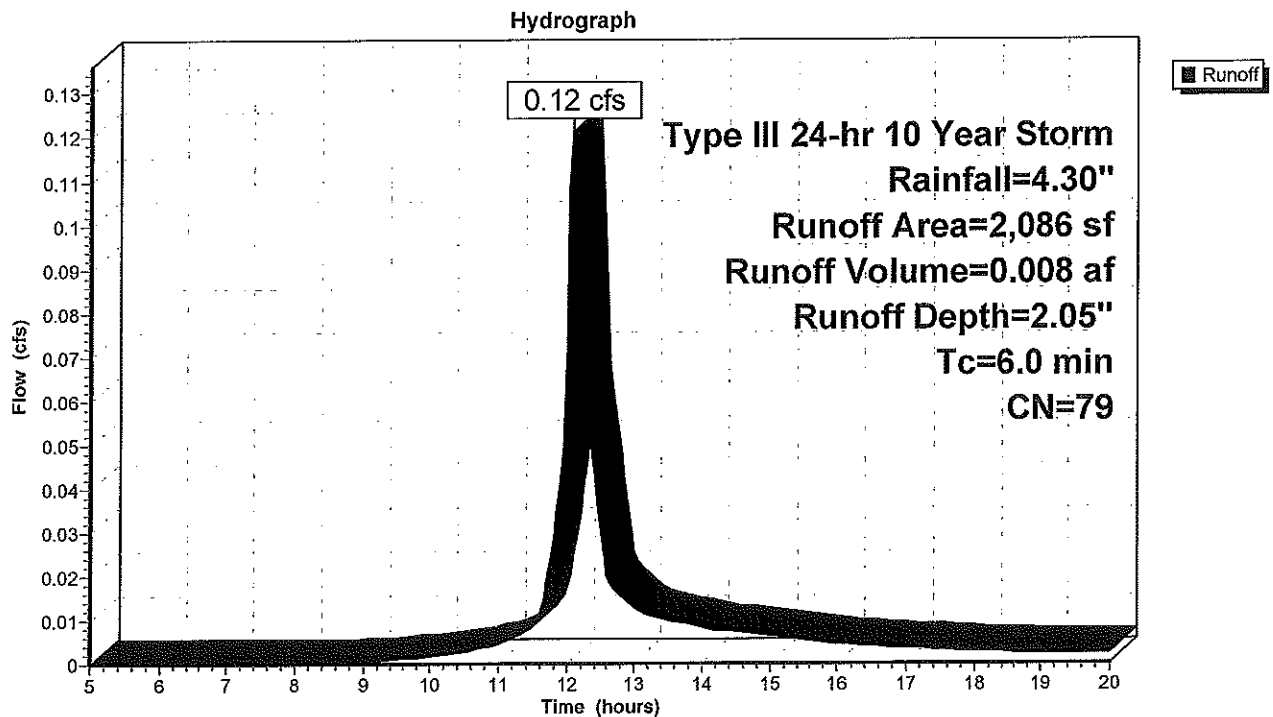
Subcatchment 2S: Remaining Areas

Runoff = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Storm Rainfall=4.30"

Area (sf)	CN	Description
426	98	Walkway
307	98	Apshalt Berm
1,353	69	50-75% Grass cover, Fair, HSG B
2,086	79	Weighted Average

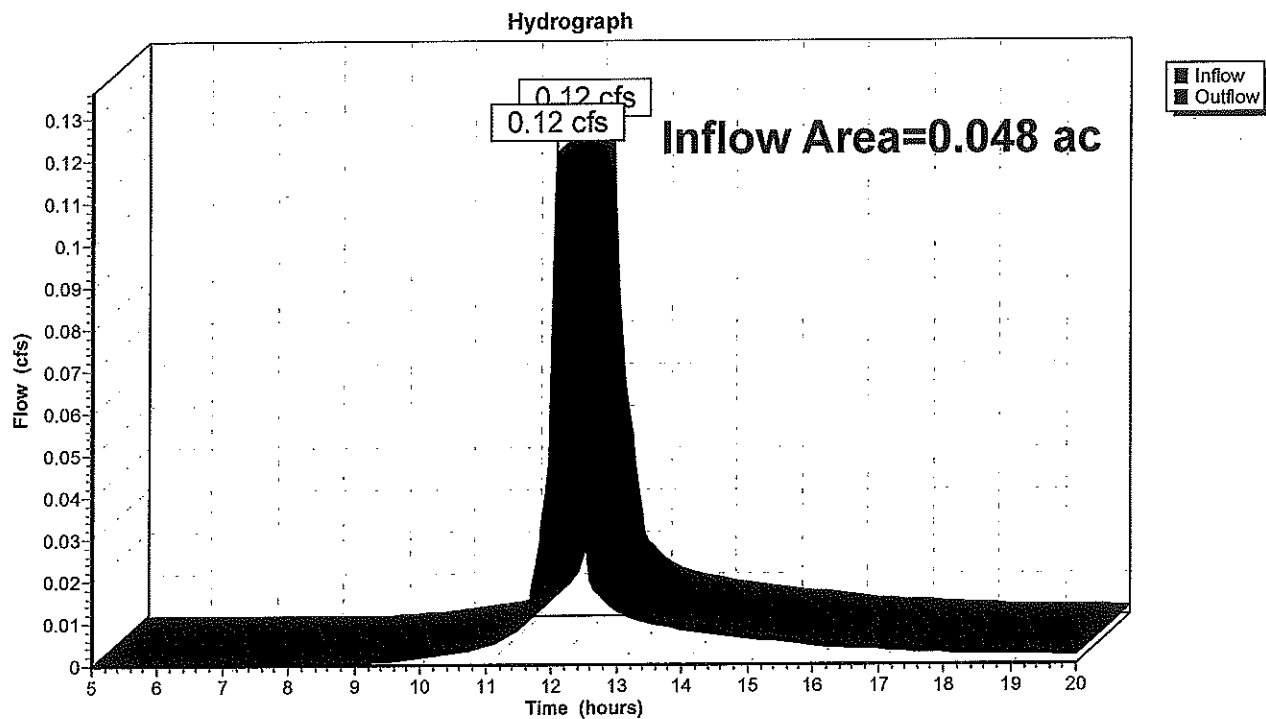
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2S: Remaining Areas

Reach 1R: Total Offsite

Inflow Area = 0.048 ac, Inflow Depth = 2.05" for 10 Year Storm event
Inflow = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af
Outflow = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite

Pond 1P: Porous pvmt Base

Design Perc rate of soils = 60 MPI

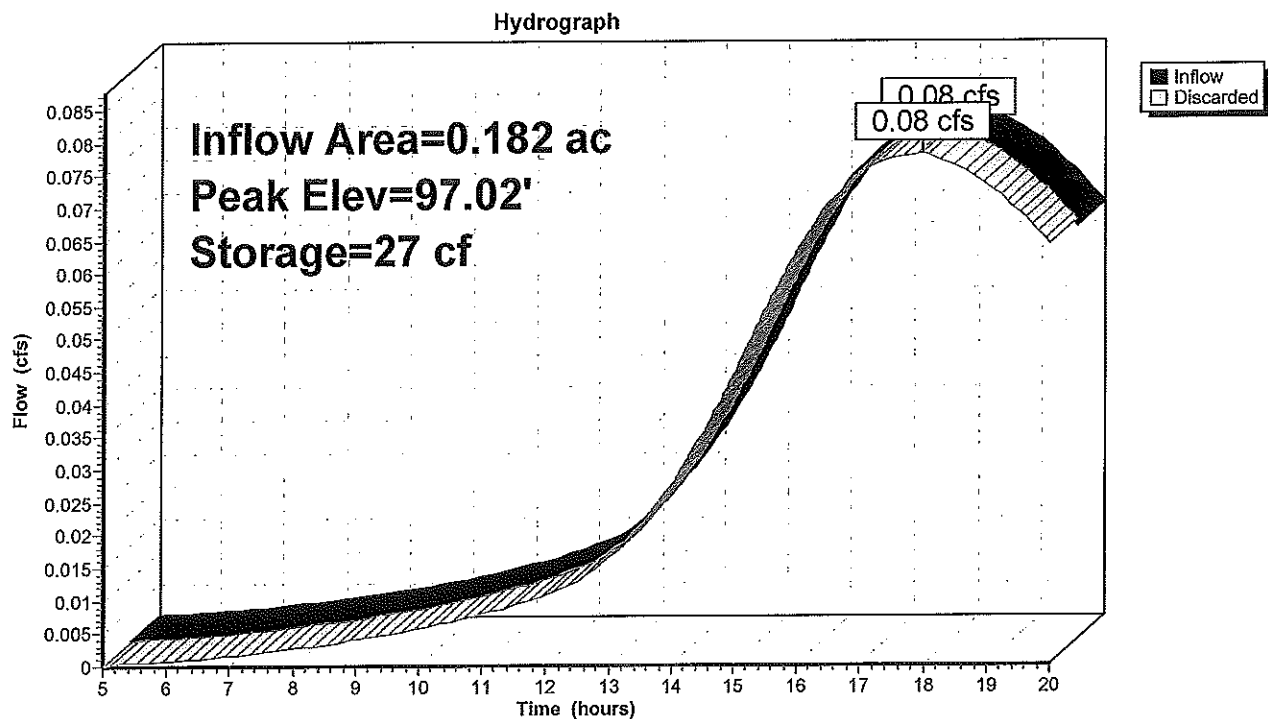
Inflow Area = 0.182 ac, Inflow Depth = 2.47" for 10 Year Storm event
 Inflow = 0.08 cfs @ 17.94 hrs, Volume= 0.037 af
 Outflow = 0.08 cfs @ 17.99 hrs, Volume= 0.037 af, Atten= 0%, Lag= 2.8 min
 Discarded = 0.08 cfs @ 17.99 hrs, Volume= 0.037 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 97.02' @ 17.99 hrs Surf.Area= 3,860 sf Storage= 27 cf
 Plug-Flow detention time= 5.7 min calculated for 0.037 af (99% of inflow)
 Center-of-Mass det. time= 2.8 min (992.9 - 990.1)

#	Invert	Avail.Storage	Storage Description
1	97.00'	3,088 cf	38.60'W x 100.00'L x 2.00'H Prismaoid 7,720 cf Overall x 40.0% Voids

#	Routing	Invert	Outlet Devices
1	Discarded	0.00'	0.001400 fpm Exfiltration over entire Surface area

Discarded OutFlow Max=0.09 cfs @ 17.99 hrs HW=97.02' (Free Discharge)
 1=Exfiltration (Exfiltration Controls 0.09 cfs)

Pond 1P: Porous pvmt Base

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Flow to Porous Pvmt

Runoff Area=7,914 sf Runoff Depth=3.78"
Tc=462.0 min CN=98 Runoff=0.12 cfs 0.057 af

Subcatchment 2S: Remaining Areas

Runoff Area=2,086 sf Runoff Depth=3.79"
Tc=6.0 min CN=79 Runoff=0.22 cfs 0.015 af

Reach 1R: Total Offsite

Inflow=0.22 cfs 0.015 af
Outflow=0.22 cfs 0.015 af

Pond 1P: Porous pvmt Base

Peak Elev=97.21' Storage=321 cf Inflow=0.12 cfs 0.057 af
Outflow=0.09 cfs 0.050 af

Total Runoff Area = 0.230 ac Runoff Volume = 0.072 af Average Runoff Depth = 3.78"

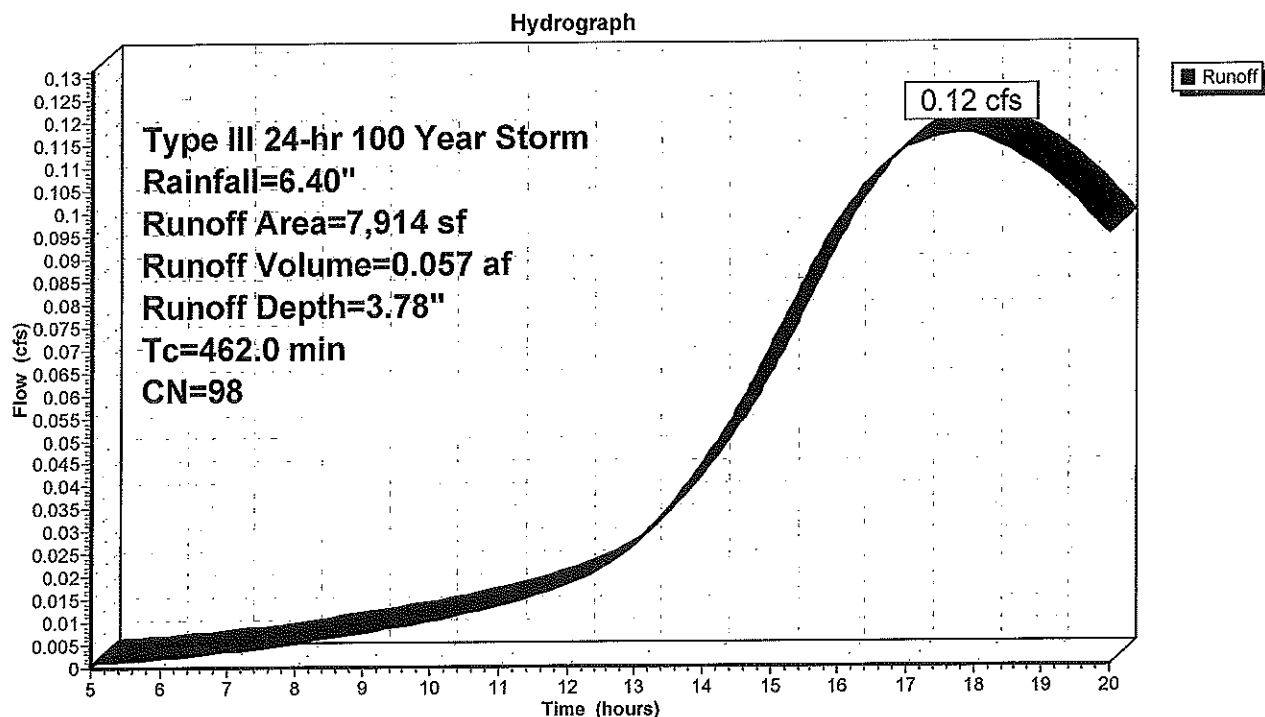
Subcatchment 1S: Flow to Porous Pvmt

Runoff = 0.12 cfs @ 17.94 hrs, Volume= 0.057 af, Depth= 3.78"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Storm Rainfall=6.40"

Area (sf)	CN	Description
3,860	98	Porous Pvmt
3,892	98	Portion of Roofed Area
162	98	dumpster pad area
7,914	98	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
462.0					Direct Entry,

Subcatchment 1S: Flow to Porous Pvmt

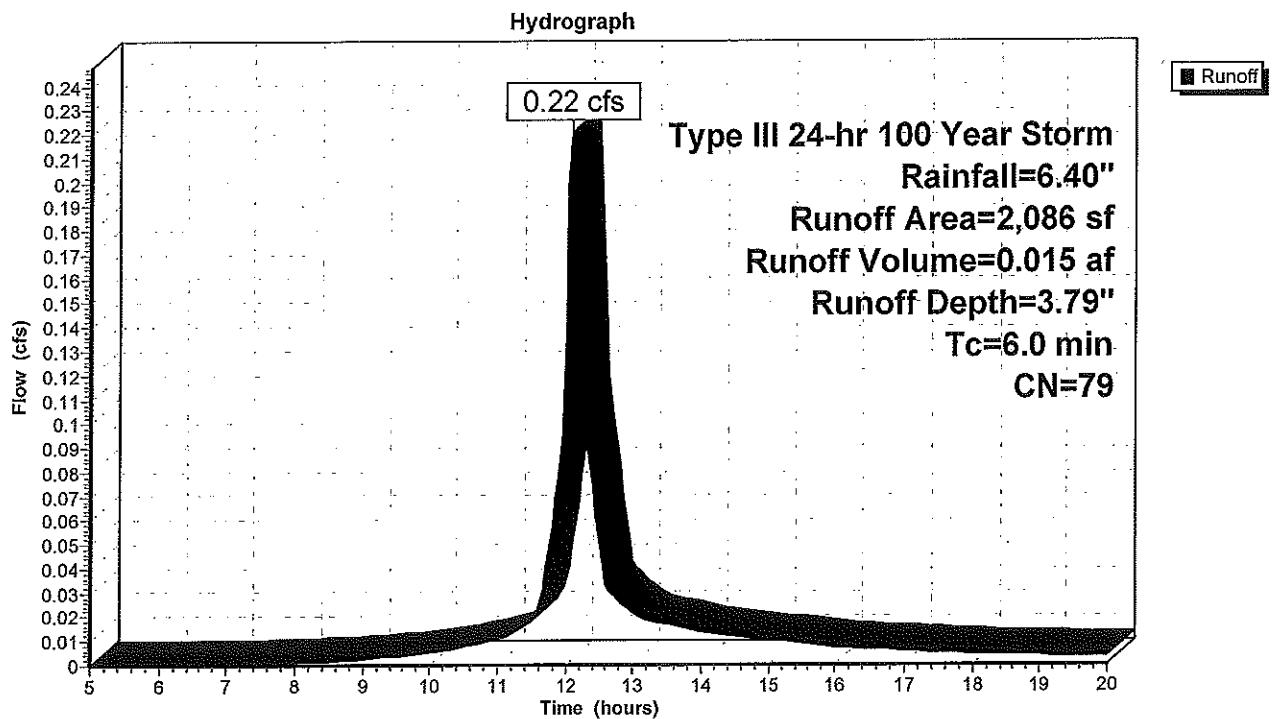
Subcatchment 2S: Remaining Areas

Runoff = 0.22 cfs @ 12.09 hrs, Volume= 0.015 af, Depth= 3.79"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100 Year Storm Rainfall=6.40"

Area (sf)	CN	Description
426	98	Walkway
307	98	Apshalt Berm
1,353	69	50-75% Grass cover, Fair, HSG B
2,086	79	Weighted Average

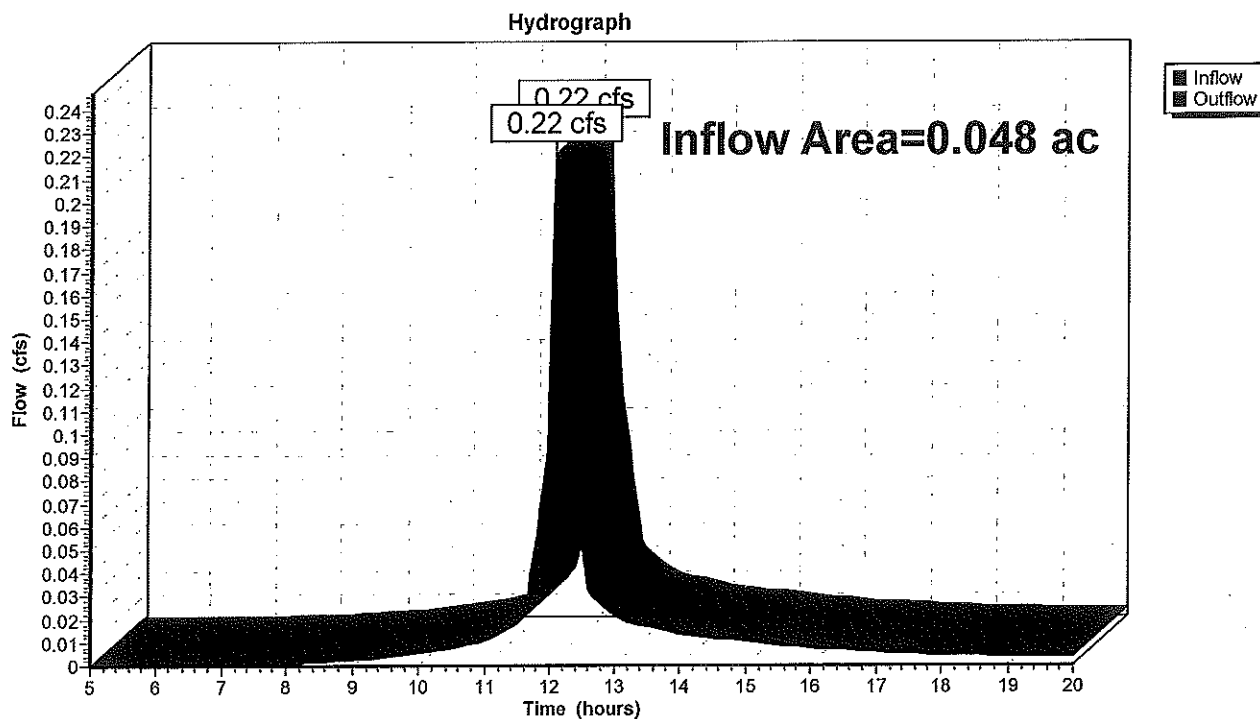
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2S: Remaining Areas

Reach 1R: Total Offsite

Inflow Area = 0.048 ac, Inflow Depth = 3.79" for 100 Year Storm event
Inflow = 0.22 cfs @ 12.09 hrs, Volume= 0.015 af
Outflow = 0.22 cfs @ 12.09 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Reach 1R: Total Offsite

Pond 1P: Porous pvmt Base

Design Perc rate of soils = 60 MPI

Inflow Area = 0.182 ac, Inflow Depth = 3.78" for 100 Year Storm event
 Inflow = 0.12 cfs @ 17.94 hrs, Volume= 0.057 af
 Outflow = 0.09 cfs @ 15.80 hrs, Volume= 0.050 af, Atten= 23%, Lag= 0.0 min
 Discarded = 0.09 cfs @ 15.80 hrs, Volume= 0.050 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 97.21' @ 20.00 hrs Surf.Area= 3,860 sf Storage= 321 cf
 Plug-Flow detention time= 19.0 min calculated for 0.050 af (87% of inflow)
 Center-of-Mass det. time= (not calculated: outflow precedes inflow)

#	Invert	Avail.Storage	Storage Description
1	97.00'	3,088 cf	38.60'W x 100.00'L x 2.00'H Prismatic 7,720 cf Overall x 40.0% Voids

#	Routing	Invert	Outlet Devices
1	Discarded	0.00'	0.001400 fpm Exfiltration over entire Surface area

Discarded OutFlow Max=0.09 cfs @ 15.80 hrs HW=97.02' (Free Discharge)

1=Exfiltration (Exfiltration Controls 0.09 cfs)

Pond 1P: Porous pvmt Base

Hydrograph

